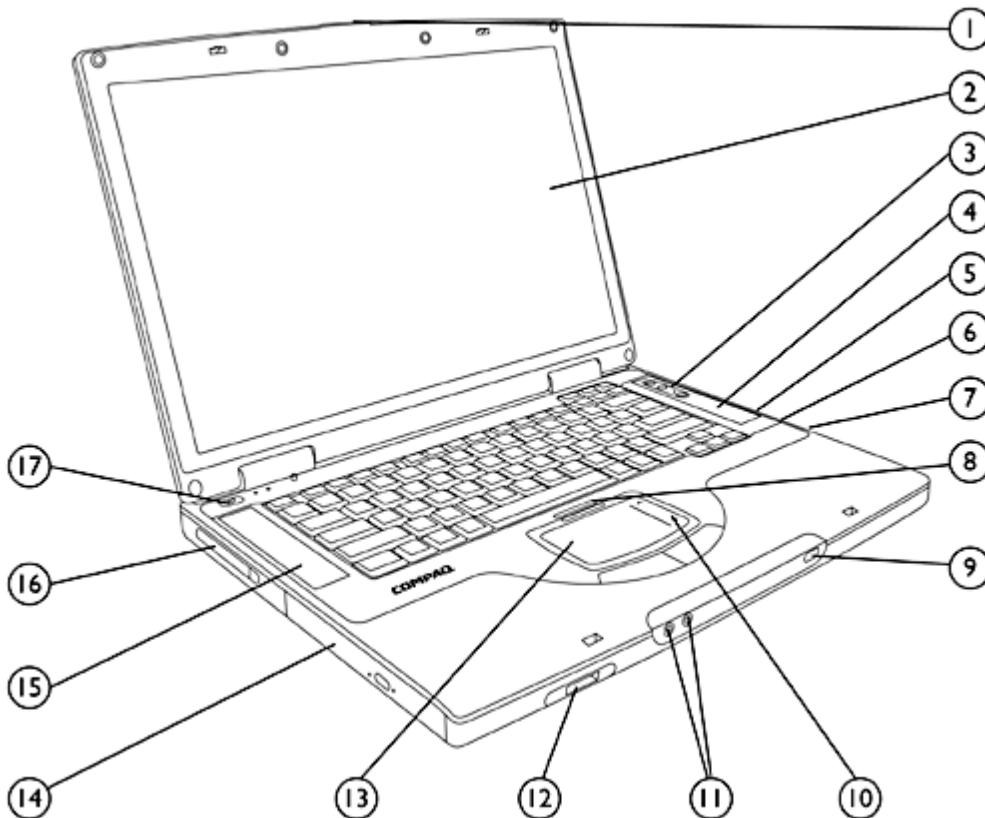
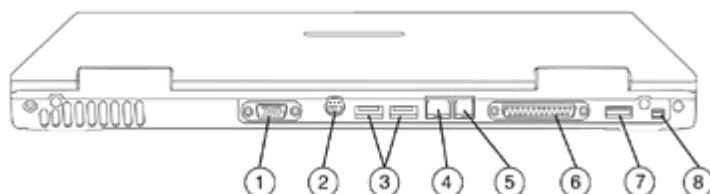


### Overview



1. Display Lid Latch
2. 15.4-inch Wide Display
3. Volume Controls
4. Right Speaker
5. Kensington Lock
6. Power connector
7. Fast IR
8. Touchpad on/off switch
9. Wireless on/off switch
10. Dedicated scroll (from #5)
11. Headphone and microphone in/out ports
12. SD Card Slot
13. Touch Pad with dedicated scroll
14. Optical Disk Drive
15. Left Speaker
16. PC Card Slot
17. Power Button



1. VGA Port
2. S-Video port
3. (2 of 3) USB ports
4. RJ-45 port
5. RJ-11 port
6. Parallel port
7. (1 of 3) USB port
8. 1394

### Overview

### At A Glance

- Microsoft Windows XP Home or  
Microsoft Windows Professional  
**NOTE:** Microsoft Windows 2000 Driver support via web.
- Intel® Centrino™ Technology
- Intel Pentium® M processors – up to 2.0 GHz
- Intel 855PM Chipset
- Intel PRO/Wireless 2100 and 2200BG network connection
- Integrated 10/100 NIC
- Optional Bluetooth
- 15.4-inch WXGA, WSXGA+, or WUXGA display
- ATI Mobility Radeon 9200 Graphics w/32MB or 64MB DDR SDRAM
- Choice of 4200 rpm and performance 5400 rpm hard drive
- Choice of DVD+RW, DVD/CD-RW, DVD or CD optical drive
- Configurations as light as 6.5 lb (2.948 kg) weight, 1.36 in (3.45 cm) thin
- 256-MB DDR SDRAM (333-MHz) 2 SODIMM slots available upgradeable to 2 GB
- Up to 80-GB 5400 rpm hard drive
- Full-sized keyboard
- Three (3) USB 2.0
- Includes a one-year, worldwide warranty. Certain restrictions and exclusions apply. Consult the HP Customer Support Center for details.

### What's New

- Intel PRO/Wireless 2200BG (802.11b/g) network connection

### What's Special

- Thin and wide design with 15.4-inch widescreen!
- Microsoft Windows XP Home or  
Microsoft Windows Professional  
**NOTE:** Microsoft Windows 2000 Driver support via web.
- Intel Centrino Technology
- Performance graphics ATI Mobility Radeon 9200 with dedicated 32MB or 64MB DDR SDRAM

### Standard Features

#### Processors

One of the following:

- Intel Pentium M processor 755\* – 2.0 GHz, 2-MB L2 cache, 400-MHz Front Side Bus
- Intel Pentium M processor 745 – 1.8 GHz, 2-MB L2 cache, 400-MHz Front Side Bus
- Intel Pentium M processor 735 – 1.7 GHz, 2-MB L2 cache, 400-MHz Front Side Bus
- Intel Pentium M processor 725 – 1.6 GHz, 2M L2 cache, 400-MHz Front Side Bus (FSB)
- Intel Pentium M processor 715 – 1.5 GHz, 2M L2 cache, 400-MHz Front Side Bus (FSB)
- Intel Pentium M processor 1.7 GHz with 400-MHz Front Side Bus and 1 MB L2 cache
- Intel Pentium M processor 1.6 GHz with 1-MB L2 cache, 400-MHz Front Side Bus
- Intel Pentium M processor 1.5 GHz with 1-MB L2 cache, 400-MHz Front Side Bus
- Intel Pentium M processor 1.4 GHz with 1-MB L2 cache, 400-MHz Front Side Bus

**NOTE:** Pentium M processors support enhanced Intel SpeedStep™ technology.

**\*NOTE:** Intel's numbering is not a measurement of higher performance.

#### Operating System

Microsoft Windows XP Professional (requires 256 MB of memory minimum) or

Microsoft Windows XP Home Edition (limited language availability) preinstalled

**NOTE:** Microsoft Windows 2000 driver support via web.

#### Chipset

Intel 855PM

#### Panel

One of the following

#### Internal Support

15.4-inch color TFT WSXGA+ with 1680 x 1050 resolution (up to 16.7M colors internal)

15.4-inch color TFT WUXGA with 1920 x 1200 resolution (up to 16.7M colors internal)

15.4-inch color TFT WXGA with 1280 x 800 resolution (up to 16.7M colors internal)

#### External Support

Up to 32-bit per pixel color depth

Supports external VGA display: 640x480, 800x600, 1024x768, 1152x864, 1280x800, 1280x1024, 1680x1050, 1600x1200, 1792x1344, 1800x1440, 1920x1200, 1920x1440, 2048x1536 resolutions up to 160-Hz refresh rate, dependent upon monitor capability, resolution and color depth settings.

#### Memory

Standard/Maximum

256-MB (333-MHz) DDR SDRAM (256-MB SODIMM in slot 1)

2048-MB (333-MHz) DDR SDRAM (1024-MB SODIMMs in slots 1 and 2)

**NOTE:** Due to the non-industry standard nature of some third-party memory modules, we recommend HP branded memory to ensure compatibility.

**NOTE:** 2 memory slots user accessible—one on the base, one underneath the keyboard deck.

#### Communications

Integrated 10/100 NIC

High speed 56K modem

**NOTE:** Designed only to allow faster downloads from compliant sources. Maximum achievable download transmission rates currently do not reach 56 KB/s, and will vary with line conditions.

**NOTE:** Modem availability is subject to country regulatory approval.



### Standard Features

#### Wireless Devices

The HP nx7010 notebook supports a broad range of secure, integrated wireless LAN options. Integrated Bluetooth is also an option and can be combined with any one of the supported wireless LAN options.

All integrated wireless LAN options – Wi-Fi certified and with Cisco Compatible Extensions support Intel PRO/Wireless 2100 (802.11b) and 2200BG (802.11b/g) network connection-Intel Centrino mobile technology, up to 11mbps throughput performance.

Integrated Bluetooth – designed to the Bluetooth v1.1 specification

**NOTE:** Wireless On/Off button – required by the FAA is located on front of unit.

#### Keyboard

The 101/102-key compatible keyboard features an industry standard, full-width layout with desktop keyboard features, such as the isolated inverted-T cursor control keys, 3x2 editing keys, both left and right control and alt keys, and 12 function keys. The US layout has 84 keys and the International layout 85 keys. Other features include an integrated numeric keypad, hotkeys for instant access to power conservation, volume, brightness, and other features, 19.05 mm x 19.05 mm key pitch (center-to-center spacing), 2.5 mm stroke, comfort-dished keycaps, and bright key legends for improved visibility in low light conditions.

#### Pointing Device

Touch pad with on/off button and dedicated scroll up/down surface

#### PC Card Slots

One Type II PC Card Slot which support both 32-bit CardBus and 16-bit PC Cards

#### Flash Media Slots

One integrated Secure Digital (SD) slot

#### Storage

##### Primary Hard Dive

80-GB 5400 rpm Hard Drive  
80-GB 4200 rpm Hard Drive  
60-GB 5400 rpm Hard Drive  
60-GB 4200 rpm Hard Drive  
40-GB 4200 rpm Hard Drive

##### Optical Drives

DVD+RW  
DVD-CD-RW combo  
DVD or  
CD

#### Multimedia

JBL Pro Speakers and 16-bit stereo sound

Dedicated hardware volume controls

Headphone-out port

Microphone-in port

Software MPEG1 support

DVD movie playback software

DVD+RW Drive (on select models)

DVD/CD-RW combo drive (on select models)

DVD-ROM drive with movie playback software (on select models)

CD-ROM drive (on select models)

4X AGP graphics

32-MB or 64-MB of VRAM

### Standard Features

|            |                              |  |
|------------|------------------------------|--|
| Interfaces | PC Card                      | One Type II  |
|            | Enhanced Parallel<br>EPP/ECP | 1 (can be used to connect external parallel diskette drive)  |
|            | VGA                          | 1  |
|            | Port Replicator              | 1 (basic port replicator only)   |
|            | Headphone/Line-out           | 1  |
|            | Microphone-in                | 1  |
|            | DC Power                     | 1  |
|            | RJ-11 (modem)                | 1  |
|            | RJ-45 (NIC)                  | 1  |
|            | Infrared Port                | 1 (4 Mb/s support)<br>(IrDA 4 MB compliant. IR performance will vary depending on performance of IR peripherals and application used.) |
|            | USB 2.0                      | 3  |
|            | 1394                         | 1  |
|            | LED status indicators        | 8  |

|          |  |
|----------|--|
| Graphics | ATI Mobility Radeon 9200, 64-bit video graphics with 32- or 64-MB dedicated memory |
|----------|--|

### Software

#### Preinstalled software

WinDVD 5.0 DVD Player (on DVD, DVD/CDRW & DVD+RW models)  
Roxio Easy CD Creator 6 (on DVD/CDRW, DVD+RW models)  
Adobe Acrobat Reader 6  
Symantec Norton Anti-Virus 2003 (complimentary 60-day live update)  
HP Mobile Printing Driver  
HP Help and Support (XP only)  
Synaptics Touchpad Driver  
Microsoft Office 2003 Applications on select models

#### Software provided on CD

Intervideo WinDVD Creator 2.0 (on DVD+RW) models

#### Additional software available from the Web

Microsoft Windows 2000 driver support  
ATI POWERPLAY (BIOS update)

### System Recovery

Each unit is shipped with a recovery CD kit containing Operating System Recovery and Driver/Application Recovery CDs. These CDs allow users to either recover or repair the notebook operating system and select drivers without losing personal data. The Operating System CD also provides the option of reinstalling the operating system software provided with the notebook.  
**(NOTE:** This option erases the hard disk and restores the base operating system. Drivers and applications are installed using the other CDs provided with the kit.)

### Security

Power-on Password  
Kensington MicroSave security slot; accepts 3rd party security lock devices.

## *Standard Features*

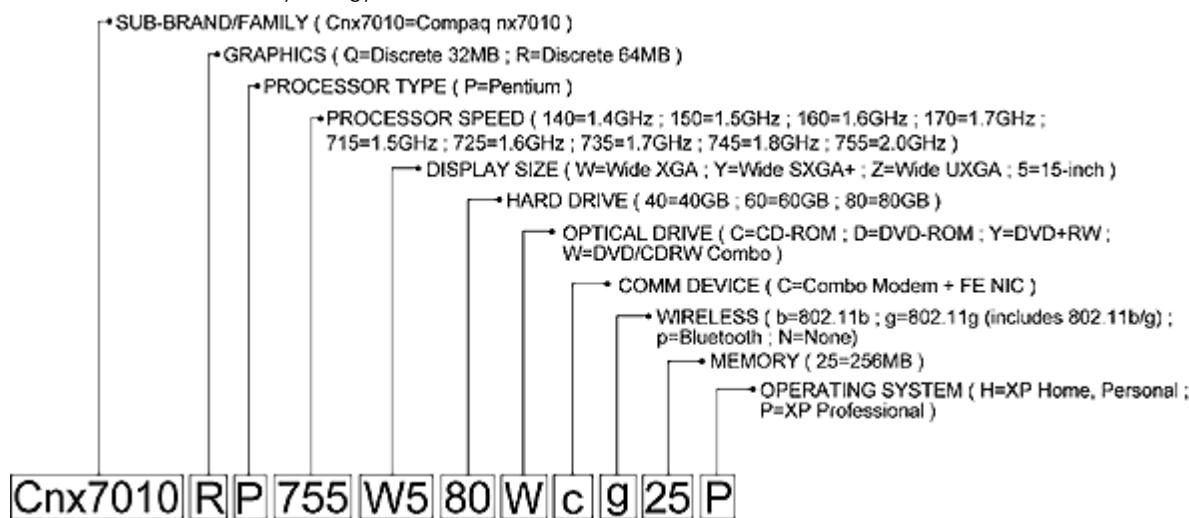
|                            |   |   |           |
|----------------------------|---|---|-----------|
| <b>Power Supply</b>        | 65-watt adapter<br>External AC adapter, 6-foot/1.8-meter power cord included. Total length including External AC adapter is 12 feet/3.66 meters   |   |           |
| <b>Battery</b>             | The HP Compaq Business Notebook nx7010 provides up to 5 hours of battery life using the standard 8-cell Lithium-Ion battery.  |   |           |
|                            | <b>Battery Re-Charge Time</b>   | System in OFF mode or Standby                     | 2 hours   |
|                            |   | System ON (depending on system power consumption) | 2-5 hours |
|                            | <b>NOTE:</b> Actual results may vary with product model, configuration, and individual usage. Hewlett-Packard testing of a HP Compaq Business Notebook nx7010 with an Intel Pentium M 1.5 GHz CPU, Windows XP Professional, 15.4-inch WSXGA+ LCD, 256-MB RAM, 60-GB HDD, Lithium-Ion battery, and NIC/modem, achieved an overall Business Winstone 2002 BatteryMark score of 5h 25m Business Winstone 2002 BatteryMark Version 1.0 units. Winstone is a registered trademark and BatteryMark™ is a trademark of Ziff Davis Publishing Holdings Inc. in the U.S. and other countries. Copyright 2002 Ziff Davis Media Inc. All Rights Reserved. System parameters followed test recommendations: panel brightness 50%, wireless turned off (802.11 and Bluetooth), power management scheme – Laptop/Portable, hard drive, standby and video timers set to never. |   |           |
|                            | <b>NOTE:</b> This test was performed without independent verification by eTesting Labs Inc. eTesting Labs Inc. makes no representations or warranties as to the result of the test. BatteryMark is a trademark of Ziff Davis Publishing Holdings Inc., and affiliate of eTesting Labs Inc., in the U.S. and other countries.  |   |           |
| <b>Power Conservation</b>  | Hibernation<br>Instant-on via Standby<br>Pop-ups with six presets<br>Supports enhanced Intel SpeedStep Technology (which allows Battery Optimized Mode, Maximum performance Mode, or Automatic mode)<br>ACPI compliant  |   |           |
| <b>Docking</b>             | Port Replicator<br>The sleek port replicator provides simple and convenient port management.<br><b>NOTE:</b> Supports all connectivity ports pass through except DVI.   |   |           |
| <b>Service and Support</b> | HP Services includes a one-year, Worldwide Limited Warranty, pick-up or carry-in; upgraded warranty and toll-free 7 x 24 hardware technical phone support available. On-site service* is also available.<br><b>NOTE:</b> Certain restrictions and exclusions apply. Consult the HP Customer Support Center for details. <a href="http://wwss1pro.compaq.com/support/warranty_upgrades/product_specific_warranty.asp">http://wwss1pro.compaq.com/support/warranty_upgrades/product_specific_warranty.asp</a><br>*on-site service available through HP Care Pack Services for US only.  |   |           |



### Standard Features

#### Naming Convention

The Etymology of a Model name:



### Options

|                             |  |            |
|-----------------------------|--|------------|
| <b>Storage</b>              | HP USB Digital Drive                           | DL702B     |
|                             | HP USB Digital Drive with 128MB SD memory card | DL702A     |
|                             | HP 5GB PC Card                                 | DF928A     |
|                             | USB 1.1 Diskette Drive                         | DC361A     |
|                             | SD Card Memory (128MB)                         | FA135A#AC3 |
|                             | SD Card Memory (256MB)                         | FA136A#AC3 |
|                             | SD Card Memory (512MB)                         | FA184A#AC3 |
| <hr/>                       |  |            |
| <b>Memory</b>               | 256-MB (333-MHz) DDR RAM Memory Upgrade        | 269086-B25 |
|                             | 512-MB (333-MHz) DDR RAM Memory Upgrade        | 269087-B25 |
|                             | 1024-MB (333-MHz) DDR RAM Memory Upgrade       | 314114-B25 |
| <hr/>                       |  |            |
| <b>Expansion</b>            | Basic Port Replicator (USB 2.0)                | 307648-xx2 |
| <hr/>                       |  |            |
| <b>Power</b>                | Primary Battery Pack (8-cell)                  | DG103A     |
|                             | 65W 3-wire AC Adapter                          | 265602-xxx |
|                             | 90W Auto/Truck Adapter                         | DC303A     |
|                             | 90W Air Cables                                 | 291370-B25 |
| <hr/>                       |  |            |
| <b>Carrying Cases</b>       | HP Entry Value BTO DIB                         | DC914A     |
|                             | HP Top Load Nylon Case                         | DC915A     |
|                             | HP Top Load Leather Case                       | DC917A     |
|                             | HP Executive Nylon Case                        | DC916A     |
|                             | HP Sport Backpack                              | DG102A     |
| <hr/>                       |  |            |
| <b>Security</b>             | PC Card Biometrics ID Device                   | 146805-B25 |
|                             | PC Card Smart Card Reader                      | 135646-B25 |
|                             | Security Cable Lock                            | 294316-B21 |
| <hr/>                       |  |            |
| <b>Input/Output Devices</b> | External 10-Key Numeric Keypad (PS/2)          | 294317-B21 |
|                             | USB/PS2 Keyboard                               | 118003-009 |
|                             | USB/PS2 Mouse                                  | 103180-B22 |
|                             | HP USB Travel Mouse (optical scroll mouse)     | F4815A     |

### Memory

#### HP Compaq nx7010 thin and wide Business Notebook

##### Standard Memory

0-MB of memory on system board,

2 Slots total

1-256-MB DIMM installed in Slot 1

1-Additional open Memory Slot (Only 1 slot user accessible)

(NOTE: 2 slots user accessible-one on the base and one underneath the keyboard deck)

| Memory | Slot 1 | Slot 2 |
|--------|--------|--------|
| 256 MB | 256 MB | Empty  |

##### Standard Memory Plus Optional Memory

Support for up to 2048-MB of DDR SDRAM memory is available with the installation of optional DDR SDRAM Memory Kits.

| Memory  | Slot 1  | Slot 2  |
|---------|---------|---------|
| 256 MB  | 256 MB  | --      |
| 384 MB  | 256 MB  | 128 MB  |
| 512 MB  | 512 MB  | --      |
| 768 MB  | 512 MB  | 256 MB  |
| 1024 MB | 512 MB  | 512 MB  |
| 1024 MB | 1024 MB | --      |
| 2048 MB | 1024 MB | 1024 MB |

NOTE: This chart does not represent all possible memory configurations. Due to the non-industry standard nature of some third-party memory modules, we strongly recommend using only HP branded memory modules to ensure compatibility.

Following are memory options available from HP:

- 1024-MB (333-MHz DDR SDRAM Memory Upgrade 314114-B25
- 512-MB (333-MHz) DDR SDRAM Memory Upgrade 269087-B25
- 256-MB (333-MHz) DDR SDRAM Memory Upgrade 269086-B25

### Storage

#### Drive Support

| System Drive Support   | Quantity Supported | Drive Bay Supported      |
|------------------------|--------------------|--------------------------|
| <b>Removable Media</b> |                    |                          |
| DVD+RW                 | 1                  | Dedicated                |
| DVD/CD-RW Combo Drive  | 1                  | Dedicated                |
| DVD-ROM Drive          | 1                  | Dedicated                |
| CD-ROM Drive           | 1                  | Dedicated                |
| <b>Hard Drives</b>     |                    |                          |
| 80-GB Hard Drive       | 1                  | Dedicated hard drive bay |
| 60-GB Hard Drive       | 1                  | Dedicated hard drive bay |
| 40-GB Hard Drive       | 1                  | Dedicated hard drive bay |

### Technical Specifications

|  |                                    |  |  |
|--|------------------------------------|--|--|
| <b>System Unit</b>                               | <b>Dimensions (HxWxD)</b>          | 15.4-inch TFT panel display  | 1.36 x 14.0 x 10.0 in (3.45 x 35.56 x 25.4 cm) |
|  | <b>Weight</b>                      | 15.4-inch LCD, CD-RW, DVD or CD, 1 SODIMM                                      | 6.5 lb (2.948 kg)                              |
| <b>NOTE:</b> * = Weight varies by configuration. |                                    |  |  |
| <b>Stand-Alone Power Requirements</b>            | Nominal Operating Voltage (Li-Ion) | 14.4 V (8-cell)  |  |
|  | Average Operating Power            | 15.8 W   |  |
|  | Peak Operating Power               | 38W  |  |
|  | Power in suspend mode              | < 800 mW   |  |
|  | Power in hibernation mode          | < 100 mW   |  |
| <b>Power Supply</b>                              | Rated Input Voltage                | 100 to 240 VAC (auto-switching)  |  |
|  | Rated Input Current                | 1.3A   |  |
|  | Rated Frequency                    | 50 to 60 Hz  |  |
| <b>Temperature</b>                               | Operating                          | 50° to 95° F (10° to 35° C)  |  |
|  | Non-operating                      | 14° to 140° F (-10° to 60° C)  |  |
| <b>Relative Humidity</b>                         | Operating                          | 10% to 90% relative humidity, non-condensing                                   |  |
|  | Non-operating                      | 5% to 90% relative humidity, 101.6° F (38.7° C)<br>Maximum wetbulb temperature |  |
| <b>Shock</b>                                     | Operating                          | 10 G, 11 ms, half-sine   |  |
|  | Non-operating                      | 60 G, 11 ms, half-sine   |  |
| <b>Vibration</b>                                 | Operating                          | 0.5 G zero-to-peak, 10 to 500 Hz, 0.25 oct/min sweep rate                      |  |
|  | Non-operating                      | 1.0 G, zero-to-peak, 10 to 500 Hz, 0.5 oct/min sweep rate                      |  |
| <b>Maximum Altitude (unpressurized)</b>          | Operating                          | 0 to 10,000 ft (0 to 3,048 m)  |  |
|  | Non-operating                      | 0 to 30,000 ft (0 to 9,144 m)  |  |

|  |                           |  |
|--|---------------------------|--|
| <b>15.4-Inch Color TFT WUXGA Display with wide viewing angle</b> | <b>Dimensions (H x W)</b> | 13.0 x 8.1 in (33.1 x 20.7 cm)                                   |
|  | <b>Diagonal Size</b>      | 15.4 in (39.1 cm)  |
|  | <b>Mounting</b>           | Internal Panel Supports, Side Mounted                            |
|  | <b>Number of Colors</b>   | Up to 16.8M  |
|  | <b>Contrast Ratio</b>     | 300:1  |
|  | <b>Brightness</b>         | 170nt typical  |
|  | <b>Pixel Resolution</b>   | Pitch 0.173 mm<br>Format 1920 x 1200<br>Configuration RGB stripe |
|  | <b>Backlight</b>          | Edge Lit   |
|  | <b>Character Display</b>  | 80 x 25  |
|  | <b>Viewing Angle</b>      | ±55° Horizontal, ±45° Vertical (typical)                         |

### Technical Specifications

|   |                    |  |
|---|--------------------|--|
| 15.4-Inch Color TFT<br>WXGA Display with wide viewing angle | Dimensions (H x W) | 13.0 x 8.1 in (33.1 x 20.7 cm)           |
|   | Diagonal Size      | 15.4 in (39.1 cm)                        |
|   | Mounting           | Internal Panel Supports, Side Mounted    |
|   | Number of Colors   | Up to 16.8M                              |
|   | Contrast Ratio     | 200:1                                    |
|   | Brightness         | 180nt typical                            |
|   | Pixel Resolution   | Pitch 0.193 mm<br>Format 1680 x 1050     |
|   |                    | Configuration RGB stripe                 |
|   | Backlight          | Edge Lit                                 |
|   | Character Display  | 80 x 25                                  |
|   | Viewing Angle      | ±65° Horizontal, ±50° Vertical (typical) |

|   |                    |  |
|---|--------------------|--|
| 15.4-Inch Color TFT<br>WXGA Display with wide viewing angle | Dimensions (H x W) | 13.0 x 8.1 in (33.1 x 20.7 cm)           |
|   | Diagonal Size      | 15.4 in (39.1 cm)                        |
|   | Mounting           | Internal Panel Supports, Side Mounted    |
|   | Number of Colors   | Up to 16.8M                              |
|   | Contrast Ratio     | 200:1                                    |
|   | Brightness         | 180nt typical                            |
|   | Pixel Resolution   | Pitch 0.259 mm<br>Format 1280 x 800      |
|   |                    | Configuration RGB stripe                 |
|   | Backlight          | Edge Lit                                 |
|   | Character Display  | 80 x 25                                  |
|   | Viewing Angle      | ±65° Horizontal, ±50° Vertical (typical) |

### Hard Drives

|                  |                                     |   |
|------------------|-------------------------------------|---|
| 80-GB (5400 rpm) | Drive Weight                        | 0.22 lb (99 g)                                    |
|                  | Capacity                            | 80 GB   |
|                  | Height                              | 0.374 in (9.5 mm)                                 |
|                  | Width                               | 2.75 in (70 mm)                                   |
|                  | Interface                           | ATA-5   |
|                  | Transfer Rate                       | Synchronous (maximum) 100 MB/s (Drive Capability) |
|                  | Seek Time                           | Single Track 3 ms                                 |
|                  | (typical reads, including settling) | Average 13 ms<br>Maximum 24 ms                    |
|                  | Rotational Speed                    | 5400 rpm  |
|                  | Logical Blocks                      | 156,301,488                                       |
|                  | Operating Temperature               | 41° to 131° F (5° to 55° C)                       |
|                  | Features                            | ATA security                                      |

### Technical Specifications

|                                     |                       |   |
|-------------------------------------|-----------------------|---|
| 80-GB (4200 rpm)                    | Drive Weight          | 0.22 lb (102 g)                                   |
|                                     | Capacity              | 80 GB   |
|                                     | Height                | 0.374 in (9.5 mm)                                 |
|                                     | Width                 | 2.75 in (70 mm)                                   |
|                                     | Interface             | ATA-5   |
|                                     | Transfer Rate         | Synchronous (maximum) 100 MB/s (Drive Capability) |
|                                     | Seek Time             | Single Track 3 ms                                 |
| (typical reads, including settling) | Average               | 13 ms   |
|                                     | Maximum               | 24 ms   |
|                                     | Rotational Speed      | 4200 rpm  |
|                                     | Logical Blocks        | 156,301,488                                       |
|                                     | Operating Temperature | 41° to 131° F (5° to 55° C)                       |
|                                     | Features              | ATA security                                      |

|                                     |                       |   |
|-------------------------------------|-----------------------|---|
| 60-GB (5400 rpm)                    | Drive Weight          | 0.22 lb (102 g)                                   |
|                                     | Capacity              | 60 GB   |
|                                     | Height                | 0.374 in (9.5 mm)                                 |
|                                     | Width                 | 2.75 in (70 mm)                                   |
|                                     | Interface             | ATA-5   |
|                                     | Transfer Rate         | Synchronous (maximum) 100 MB/s (Drive Capability) |
|                                     | Seek Time             | Single Track 3 ms                                 |
| (typical reads, including settling) | Average               | 13 ms   |
|                                     | Maximum               | 24 ms   |
|                                     | Rotational Speed      | 5400 rpm  |
|                                     | Logical Blocks        | 117,210,240                                       |
|                                     | Operating Temperature | 41° to 131° F (5° to 55° C)                       |
|                                     | Features              | ATA security                                      |

|                                     |                       |   |
|-------------------------------------|-----------------------|---|
| 60-GB (4200 rpm)                    | Drive Weight          | 0.22 lb (102 g)                                   |
|                                     | Capacity              | 60 GB   |
|                                     | Height                | 0.374 in (9.5 mm)                                 |
|                                     | Width                 | 2.75 in (70 mm)                                   |
|                                     | Interface             | ATA-5   |
|                                     | Transfer Rate         | Synchronous (maximum) 100 MB/s (Drive Capability) |
|                                     | Seek Time             | Single Track 3 ms                                 |
| (typical reads, including settling) | Average               | 13 ms   |
|                                     | Maximum               | 24 ms   |
|                                     | Rotational Speed      | 4200 rpm  |
|                                     | Logical Blocks        | 117,210,240                                       |
|                                     | Operating Temperature | 41° to 131° F (5° to 55° C)                       |
|                                     | Features              | ATA security                                      |

### Technical Specifications

|                                     |                       |   |
|-------------------------------------|-----------------------|---|
| 40-GB (4200 rpm)                    | Drive Weight          | 0.22 lb (102 g)                                   |
|                                     | Capacity              | 40 GB   |
|                                     | Height                | 0.374 in (9.5 mm)                                 |
|                                     | Width                 | 2.75 in (70 mm)                                   |
|                                     | Interface             | ATA-5   |
|                                     | Transfer Rate         | Synchronous (maximum) 100 MB/s (Drive Capability) |
|                                     | Seek Time             | Single Track 3.0 ms                               |
| (typical reads, including settling) | Average               | 13 ms   |
|                                     | Maximum               | 24 ms   |
|                                     | Rotational Speed      | 4200 rpm  |
|                                     | Logical Blocks        | 78,140,160  |
|                                     | Operating Temperature | 41° to 131° F (5° to 55° C)<br>ATA security       |

|   |                      |  |
|---|----------------------|--|
| External AC Adapter without Power Factor Correction | Weight               | 0.65 lb (0.29 kg) (adapter)<br>0.29 lb (0.13 kg) (power cord)  |
|   | Power Supply (Input) | Operating Voltage 100 to 240 VAC RMS<br>Operating Current 1.7 A RMS<br>Operating Frequency Range 47 to 63 Hz AC<br>Maximum Transient 4/50 kV |

|                                   |                        |  |
|-----------------------------------|------------------------|--|
| Lithium-Ion Battery Pack (8-cell) | Dimensions (L x W x D) | 5.25 x 3.63 x 0.75 in (13.4 x 9.2 x 1.9 cm)  |
|                                   | Weight                 | 0.96 lb (0.43 kg)  |
|                                   | Energy                 | Voltage 14.8 V<br>Amp-hour capacity Typical 4.4 Ah<br>Watt-hour capacity Typical 64 Wh |
|                                   | Temperature            | Operating 32° to 140° F (0° to 60° C)<br>Non-operating -4° to 140° F (-20° to 60° C)   |

### Technical Specifications

|                                |   |             |     |         |
|--------------------------------|---|-------------|-----|---------|
| DVD+RW Drive                   | Access Times  | Random      | CD  | <175 ms |
|                                |   | DVD         | DVD | <230 ms |
|                                | Full Stroke   | CD          | CD  | <285 ms |
|                                |   | DVD         | DVD | <335 ms |
| Maximum data transfer rate     | 24X - CD-ROM  | 3600 KB/s   |     |         |
|                                | 8X - DVD  | 10,800 KB/s |     |         |
|                                | 16X - CD-R  | 2400 KB/s   |     |         |
|                                | 8X - CD-RW  | 1200 KB/s   |     |         |
|                                | 2X - DVD+R  | 2700 KB/s   |     |         |
|                                | 2X - DVD+RW   | 2700 KB/s   |     |         |
| Transfer Mode                  | Multiword DMA Mode 2  |             |     |         |
| Interface                      | EIDE  |             |     |         |
| Supported Media (read)         | CD-DA, CD+(E)G, CD-MIDI, CD-TEXT, CD-ROM, CD-ROM XA, MIXED MODE CD, CD-I, CD-I Bridge (Photo-CD, Video CD), Multisession CD (Photo-CD, CD-EXTRA, Portfolio, CD-R, CD-RW), CD-R, CD-RW, DVD-ROM (DVD-5, DVD-9, DVD-10, DVD-18), DVD-R, DVD-RW, DVD+R, DVD+RW |             |     |         |
| Supported Media (write)        | CD-R, CD-RW, DVD+R, DVD+RW  |             |     |         |
| Maximum Media Capacity (read)  | 4.7 GB  |             |     |         |
| Maximum Media Capacity (write) | 4.7 GB  |             |     |         |
| Transport                      | tray loading  |             |     |         |

|  |   |             |         |  |
|--|---|-------------|---------|--|
| 24X DVD/CD-RW Combo Access Times Drive | Random  | CD          | <110 ms |  |
|  | DVD   | DVD         | <130 ms |  |
|  | Full Stroke   | CD          | <210 ms |  |
|  |   | DVD         | <225 ms |  |
| Maximum data transfer rate             | 24X - CD-ROM  | 3600 KB/s   |         |  |
|  | 8X - DVD  | 10,800 KB/s |         |  |
|  | 24X - CD-R  | 3600 KB/s   |         |  |
|  | 24X - CD-RW   | 3600 KB/s   |         |  |
| Transfer Mode                          | Multiword DMA Mode 2  |             |         |  |
| Interface                              | EIDE  |             |         |  |
| Supported Media (read)                 | CD-DA, CD+(E)G, CD-MIDI, CD-TEXT, CD-ROM, CD-ROM XA, MIXED MODE CD, CD-I, CD-I Bridge (Photo-CD, Video CD), Multisession CD (Photo-CD, CD-EXTRA, Portfolio, CD-R, CD-RW), CD-R, CD-RW, DVD-ROM (DVD-5, DVD-9, DVD-10, DVD-18), DVD-R, DVD-RW, DVD+R, DVD+RW |             |         |  |
| Supported Media (write)                | CD-R, CD-RW   |             |         |  |
| Maximum Media Capacity (read)          | 4.7 GB  |             |         |  |
| Maximum Media Capacity (write)         | 700 MB  |             |         |  |
| Transport                              | tray loading  |             |         |  |

### Technical Specifications

|                               |   |                          |           |          |
|-------------------------------|---|--------------------------|-----------|----------|
| 8X DVD-ROM Drive              | Access Times  | Random                   | CD        | < 100 ms |
|                               |   | Full Stroke              | DVD       | < 125 ms |
|                               |   |                          | CD        | < 175 ms |
|                               |   |                          | DVD       | < 225 ms |
| Maximum data transfer rate    | 24X - CD-ROM<br>8X - DVD  | 3600 KB/s<br>10,800 KB/s |           |          |
| Transfer Mode                 | Multiword DMA Mode 2  |                          |           |          |
| Interface                     | EIDE  |                          |           |          |
| Supported Media (read)        | CD-DA, CD+(E)G, CD-MIDI, CD-TEXT, CD-ROM, CD-ROM XA, MIXED MODE CD, CD-I, CD-I Bridge (Photo-CD, Video CD), Multisession CD (Photo-CD, CD-EXTRA, Portfolio, CD-R, CD-RW), CD-R, CD-RW, DVD-ROM (DVD-5, DVD-9, DVD-10, DVD-18), DVD-R, DVD-RW, DVD+R, DVD+RW |                          |           |          |
| Maximum Media Capacity (read) | 4.7 GB  |                          |           |          |
| Transport                     | tray loading  |                          |           |          |
| 24X CD-ROM Drive              | Access Times  | Random                   | CD        | <110 ms  |
|                               |   | Full Stroke              | CD        | <220 ms  |
|                               | Maximum data transfer rate  | 24X - CD-ROM             | 3600 KB/s |          |
|                               | Transfer Mode   | Multiword DMA Mode 2     |           |          |
| Interface                     | EIDE  |                          |           |          |
| Supported Media (read)        | CD-DA, CD+(E)G, CD-MIDI, CD-TEXT, CD-ROM, CD-ROM XA, MIXED MODE CD, CD-I, CD-I Bridge (Photo-CD, Video CD), Multisession CD (Photo-CD, CD-EXTRA, Portfolio, CD-R, CD-RW), CD-R, CD-RW   |                          |           |          |
| Maximum Media Capacity (read) | 700 MB  |                          |           |          |
| Transport                     | tray loading  |                          |           |          |

### Technical Specifications

| Audio                            | Features                           | SoundMAX  |
|----------------------------------|------------------------------------|---|
|                                  | <b>Wavetable Synthesis</b>         |   |
| # of Voices                      |                                    | Up to 1024 (CPU dependent)                          |
| # of MIDI Channels               |                                    | 16  |
| Max. Sound Set Size              |                                    | Unlimited (host RAM dependent)                      |
| Sound Set Formats                |                                    | DLS (Level 1), XGLite                               |
| Bundled GeneralMIDI Sound Set(s) |                                    | 1.2 MB XGLite                                       |
| Built-In Effects                 |                                    | Reverb and Chorus                                   |
| Sound Blaster PRO Emulation      |                                    | Yes   |
|                                  | <b>3D Positioning/Environments</b> |   |
| Formats Supported                |                                    | I3DL2/DS3D 7/EAX 2/A3D 1                            |
| Environmental Acoustics          |                                    | EnvironmentFX (EAX compatible)                      |
| Additional 3D APIs               |                                    | MacroFX / ZoomFX                                    |
| Standard HRTFs                   |                                    | 2 Channel   |
|                                  | <b>Hardware</b>                    |   |
| Implementation                   |                                    | AC97 CODEC  |
| Audio Signal Link to CPU         |                                    | Audio CODEC (AC) link                               |
| Full Duplex                      |                                    | Yes   |
| Stereo Inputs                    |                                    | Line In - 20K Impedance from (with Port Replicator) |
| Mono Inputs                      |                                    | Microphone - 20K Impedance                          |
| Stereo Outputs                   |                                    | Analog, S/PDIF from Port Replicator only            |
|                                  | <b>Audio Output Quality</b>        |   |
| Frequency Response               |                                    | 20 Hz - 20 kHz                                      |
| Signal to Noise Ratio            |                                    | >94dB   |
| Total Harmonic Distortion        |                                    | 0.01%   |
| Play/Record Sampling Rate(s)     |                                    | 7 kHz - 48 kHz                                      |
| AD/DA Resolution                 |                                    | 16 bit  |
|                                  | <b>Speakers</b>                    |   |
| Amplifier Power                  |                                    | JBL Pro   |
| Speaker Impedance                |                                    | 2-Watts RMS   |
|                                  |                                    | 4-Ohms  |

### Technical Specifications

|                             |                           |   |
|-----------------------------|---------------------------|---|
| Integrated Agere AC97 Modem | Form Factor               | MDC Daughtercard  |
|                             | Power Management Support  | APM Revision 1.2, ACPI  |
|                             | Approvals/ Certifications | UL, CSA, NEMKO, CCIB, Industry Canada, FCC Part 68, CTR21, FCC Part 15 Class B, Canadian ICES-003 Class B, C.I.S.P.R.22, Australian ACA, CE Mark, Other Countries   |
|                             | Data Mode Capabilities    | High speed 56K modem (a-law, mu-law)<br>V.8bis<br>V.80<br>V44, V.42bis, MNP5 (Compression)<br>V.42 (LAPM, MNP2-4) (Error Correction)<br>V.34 (file date: 10/96)<br><b>Optional symbol rates:</b><br>2800, 3429<br>Asymmetric Symbol rates<br><b>Synchronous primary channel data signaling rates:</b><br>3600, 31200<br>Automatic rate re-negotiation<br>V.32bis<br>V.32<br>V.23<br>V.22bis<br>V.22<br>V.21<br>Bell 212A<br>Bell 103J |
|                             | Fax Mode Capabilities     | TIA-578-S (Class 1)<br>T.30, T.4 (Group 3)<br>V.17<br>V.29<br>V.27ter<br>V.21 Channel 2<br>V.250 (Partial)  |
|                             | Command Set               | TIA-602<br>Identification: +GMI, +GMM, +GMR<br>Port control: +IPR, +ICF, +IFC, +ILRR<br>Modulation: +MS, +MR, +MA<br>Error control: +ES, +ER, +EB, +ESR, +ETBM<br>Data compression: +DS, +DR<br>V.251   |

### Technical Specifications

|  |                        |  |
|--|------------------------|--|
| Intel PRO/Wireless 2100 Network Connection | Form Factor            | Mini PCI Type 3B (model WM3B7100 AND WM3B2100)   |
|  | Dual Diversity Antenna | On-board dual diversity switching  |
|  | Frequency Band         | 2.4 to 2.497 GHz   |
|  | Modulation             | CCK, DQPSK, DBPSK  |
|  | Wireless Medium        | 2.4 GHz ISM: Direct Sequence Spread Spectrum (DSSS)  |
|  | Channels               | Full 14 channel support. Multinational support with frequency bands and channels compliant to local regulations. |
|  | Data Rates             | 802.11b: 1, 2, 5.5, 11 Mbps  |
|  | Indoor Range           | 100 ft (30 m) at 11 Mbps/300 ft (90 m) at 1 Mbps   |
|  | Outdoor Range          | 400 ft (120 m) at 11 Mbps/1500 ft (460 m) at 1 Mbps  |
|  | Transmit Output Power  | 16 dBm (typical)   |
|  | Operating Systems      | Microsoft Windows XP Professional<br>Microsoft Windows XP Home Edition<br>Microsoft Windows 2000                 |
|  | WECA                   | WiFi certification for 802.11b   |
|  | WHQL                   | Yes  |
|  | WLAN Standard          | IEEE 802.11b   |
|  | Architecture           | Infrastructure or ad hoc (peer-to-peer)  |
|  | Roaming                | 802.11b compliant for seamless roaming between access points   |
|  | Security               | LEAP, TKIP, 802.1x, EAP-TLS, 128-bit and 64-bit WEP  |

|  |                        |  |
|--|------------------------|--|
| Intel PRO/Wireless 2200BG Network Connection | Form Factor            | Mini PCI Type 3B (model WM3B2200BG)  |
|  | Dual Diversity Antenna | On-board dual diversity switching  |
|  | Frequency Band         | 2.4 to 2.497 GHz   |
|  | Modulation             | CCK, DQPSK, DBPSK, OFDM  |
|  | Wireless Medium        | 2.4 GHz ISM: Direct Sequence Spread Spectrum (DSSS)  |
|  | Channels               | Full 14 channel support. Multinational support with frequency bands and channels compliant to local regulations. |
|  | Data Rates             | 802.11b: 1, 2, 5.5, 11 Mbps<br>802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps  |
|  | Indoor Range           | 100 ft (30 m) at 11 Mbps/300 ft (90 m) at 1 Mbps   |
|  | Outdoor Range          | 400 ft (120 m) at 11 Mbps/1500 ft (460 m) at 1 Mbps  |
|  | Transmit Output Power  | 18 dBm (typical) for 802.11b<br>15 dBm (typical) for 802.11g (varies with data rate)                             |
|  | Operating Systems      | Microsoft Windows XP Professional<br>Microsoft Windows XP Home Edition<br>Microsoft Windows 2000                 |
|  | WECA                   | WiFi certification for 802.11b, 802.11g  |
|  | WHQL                   | Yes  |
|  | WLAN Standard          | IEEE 802.11b, 802.11g  |
|  | Architecture           | Infrastructure or ad hoc (peer-to-peer)  |
|  | Roaming                | 802.11 compliant for seamless roaming between access points  |
|  | Security               | LEAP, TKIP, 802.1x, EAP-TLS, 128-bit and 64-bit WEP  |

### Technical Specifications

|                              |                               |   |
|------------------------------|-------------------------------|---|
| <b>Integrated 10/100 NIC</b> | <b>Ethernet Features</b>      | 10 Mbit/s operation (10BASE-T; IEEE 802.3i; IEEE 802.3 clauses 13-14)<br>100 Mbit/s operation (100BASE-TX; IEEE 802.3u; IEEE 802.3 clauses 21-30)<br>Auto-Negotiation (Automatic Speed Selection)<br>Full and Half Duplex operation at 10 and 100 Mbit/s<br>IEEE 802.1p QoS (Quality of Service) Support<br>IEEE 802.3x Flow Control (IEEE 802.3 clauses 31-32; configurable) |
|                              | <b>Power Management</b>       | ACPI compliant  |
|                              | <b>Performance Features</b>   | TCP/IP/UDP Checksum Offload (configurable)<br>Microsoft Large Send Offload (configurable)<br>TCP Segmentation Offload<br>CPU Task Offload   |
|                              | <b>Manageability</b>          | PXE Remote Boot   |
|                              | <b>NIC Device Driver Name</b> | Realtek RTL8139 C+ Fast Ethernet NIC  |
|                              | <b>Drivers Available</b>      | Windows XP<br>Windows 2000  |

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